

## **STIC Biotechnology Systems Branch**

### **RAW SEQUENCE LISTING** **ERROR REPORT**

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/732,914B  
Source: IFU616  
Date Processed by STIC: 3/13/07

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE **CHECKER VERSION 4.4.0 PROGRAM**, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail. Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom. Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/ebc/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 01/14/05):  
U.S. Patent and Trademark Office, Mail Stop Sequence, Customer Window, Randolph Building, 401 Dulany Street, Alexandria, VA 22314

Revised 01/10/06

ER: 69732914B

20> ~~Sequence(s) \_\_\_\_\_ missing the <220> "Feature" and associated numeric identifiers and responses~~  
 Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or  
 "Unknown." Please explain source of genetic material in <220> to <223> section.  
 (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)



IFW16

## RAW SEQUENCE LISTING

DATE: 03/13/2007

PATENT APPLICATION: US/09/732,914B

TIME: 15:43:47

Input Set : N:\efs\03\_12\_07\09732914B\_efs\IVGN251\_ST25.txt

Output Set: N:\CRF4\03132007\I732914B.raw

in

3 <110> APPLICANT: Invitrogen Corporation  
 4 Cheo, David  
 5 Brasch, Michael A.  
 6 Temple, Gary F.  
 7 Hartley, James L.  
 8 Byrd, Devon R.N.  
 10 <120> TITLE OF INVENTION: Use of Multiple Recombination Sites With Unique Specificity  
 11 Recombinational Cloning  
 13 <130> FILE REFERENCE: IVGN 251.2 CIP  
 15 <140> CURRENT APPLICATION NUMBER: 09/732,914B  
 16 <141> CURRENT FILING DATE: 2000-12-11  
 18 <150> PRIOR APPLICATION NUMBER: 60/169,983  
 19 <151> PRIOR FILING DATE: 1999-12-10  
 21 <150> PRIOR APPLICATION NUMBER: 60/188,020  
 22 <151> PRIOR FILING DATE: 2000-03-09  
 24 <160> NUMBER OF SEQ ID NOS: 141  
 26 <170> SOFTWARE: PatentIn version 3.3  
 28 <210> SEQ ID NO: 1  
 29 <211> LENGTH: 27  
 30 <212> TYPE: DNA  
 31 <213> ORGANISM: Artificial  
 33 <220> FEATURE:  
 34 <223> OTHER INFORMATION: (attB0) -Invalid Response  
 36 <400> SEQUENCE: 1  
 37 agcctgcttt tttatactaa cttgagc  
 40 <210> SEQ ID NO: 2  
 41 <211> LENGTH: 27  
 42 <212> TYPE: DNA  
 43 <213> ORGANISM: Artificial  
 45 <220> FEATURE:  
 46 <223> OTHER INFORMATION: (attP0) -Invalid Response  
 48 <400> SEQUENCE: 2  
 49 gttcagcttt tttatactaa gttggca  
 52 <210> SEQ ID NO: 3  
 53 <211> LENGTH: 27  
 54 <212> TYPE: DNA  
 55 <213> ORGANISM: Artificial  
 57 <220> FEATURE:  
 58 <223> OTHER INFORMATION: (attL0) Same error  
 60 <400> SEQUENCE: 3  
 61 agcctgcttt tttatactaa gttggca  
 64 <210> SEQ ID NO: 4  
 65 <211> LENGTH: 27

Does Not Comply  
 (pg. 1-5)

← PLS  
 27  
 explain  
 source of

27  
 genetic material

See item # 11

27  
 on error  
 summary  
 sheet  
 3/13/2007

## RAW SEQUENCE LISTING

DATE: 03/13/2007

PATENT APPLICATION: US/09/732,914B

TIME: 15:43:47

Input Set : N:\efs\03\_12\_07\09732914B\_efs\IVGN251\_ST25.txt

Output Set: N:\CRF4\03132007\I732914B.raw

66 <212> TYPE: DNA  
67 <213> ORGANISM: Artificial  
69 <220> FEATURE:  
70 <223> OTHER INFORMATION: attR0  
72 <400> SEQUENCE: 4

*Same error*

27

73 gttcagcttt tttatactaa cttgagc  
76 <210> SEQ ID NO: 5  
77 <211> LENGTH: 25  
78 <212> TYPE: DNA

79 <213> ORGANISM: Artificial  
81 <220> FEATURE:

82 <223> OTHER INFORMATION: attB1  
84 <400> SEQUENCE: 5

*Same error*

25

85 agcctgcttt tttgtacaaa cttgt  
88 <210> SEQ ID NO: 6  
89 <211> LENGTH: 27

90 <212> TYPE: DNA  
91 <213> ORGANISM: Artificial

93 <220> FEATURE:  
94 <223> OTHER INFORMATION: attP1

*Same error*

96 <400> SEQUENCE: 6  
97 gttcagcttt tttgtacaaa gttggca

100 <210> SEQ ID NO: 7  
101 <211> LENGTH: 27

102 <212> TYPE: DNA  
103 <213> ORGANISM: Artificial

105 <220> FEATURE:  
106 <223> OTHER INFORMATION: attL1

*Same error*

108 <400> SEQUENCE: 7  
109 agcctgcttt tttgtacaaa gttggca

112 <210> SEQ ID NO: 8  
113 <211> LENGTH: 25

114 <212> TYPE: DNA  
115 <213> ORGANISM: Artificial

117 <220> FEATURE:  
118 <223> OTHER INFORMATION: attR1

*Same error*

120 <400> SEQUENCE: 8  
121 gttcagcttt tttgtacaaa cttgt

124 <210> SEQ ID NO: 9  
125 <211> LENGTH: 25

126 <212> TYPE: DNA  
127 <213> ORGANISM: Artificial

129 <220> FEATURE:  
130 <223> OTHER INFORMATION: attB2

*Same error*

132 <400> SEQUENCE: 9  
133 acccagcttt cttgtacaaa gtggt

136 <210> SEQ ID NO: 10  
137 <211> LENGTH: 27

138 <212> TYPE: DNA

25

*See item  
# 11 on  
error  
Summary  
Sheet.*

## RAW SEQUENCE LISTING

DATE: 03/13/2007

PATENT APPLICATION: US/09/732,914B

TIME: 15:43:47

Input Set : N:\efs\03\_12\_07\09732914B\_efs\IVGN251\_ST25.txt

Output Set: N:\CRF4\03132007\I732914B.raw

139 <213> ORGANISM: Artificial

141 <220> FEATURE:

142 <223> OTHER INFORMATION: attB2

144 <400> SEQUENCE: 10

145 gttcagcttt cttgtacaaa gttggca

148 <210> SEQ ID NO: 11

149 <211> LENGTH: 27

150 <212> TYPE: DNA

151 <213> ORGANISM: attL2

153 <400> SEQUENCE: 11

154 acccagcttt cttgtacaaa gttggca 27

157 <210> SEQ ID NO: 12

158 <211> LENGTH: 25

159 <212> TYPE: DNA

160 <213> ORGANISM: Artificial

162 <220> FEATURE:

163 <223> OTHER INFORMATION: attR2

165 <400> SEQUENCE: 12

166 gttcagcttt cttgtacaaa gtggt 25

169 <210> SEQ ID NO: 13

170 <211> LENGTH: 22

171 <212> TYPE: DNA

172 <213> ORGANISM: Artificial

174 <220> FEATURE:

175 <223> OTHER INFORMATION: attB5

177 <400> SEQUENCE: 13

178 caactttatt atacaaagtt gt 22

181 <210> SEQ ID NO: 14

182 <211> LENGTH: 27

183 <212> TYPE: DNA

184 <213> ORGANISM: Artificial

186 <220> FEATURE:

187 <223> OTHER INFORMATION: attP5

189 <400> SEQUENCE: 14

190 gttcaacttt attatacaaa gttggca 27

193 <210> SEQ ID NO: 15

194 <211> LENGTH: 24

195 <212> TYPE: DNA

196 <213> ORGANISM: Artificial

198 <220> FEATURE:

199 <223> OTHER INFORMATION: attL5

201 <400> SEQUENCE: 15

202 caactttatt atacaaagtt ggca 24

205 <210> SEQ ID NO: 16

206 <211> LENGTH: 25

207 <212> TYPE: DNA

208 <213> ORGANISM: Artificial

210 <220> FEATURE:

211 <223> OTHER INFORMATION: attR5

Same  
errors  
27

## RAW SEQUENCE LISTING

DATE: 03/13/2007

PATENT APPLICATION: US/09/732,914B

TIME: 15:43:47

Input Set : N:\efs\03\_12\_07\09732914B\_efs\IVGN251\_ST25.txt

Output Set: N:\CRF4\03132007\I732914B.raw

213 <400> SEQUENCE: 16  
 214 gttcaacttt attatacaaa gttgt  
 217 <210> SEQ ID NO: 17  
 218 <211> LENGTH: 22  
 219 <212> TYPE: DNA  
 220 <213> ORGANISM: Artificial  
 222 <220> FEATURE:  
 223 <223> OTHER INFORMATION: attB11  
 225 <400> SEQUENCE: 17  
 226 caacttttct atacaaagtt gt 22  
 229 <210> SEQ ID NO: 18  
 230 <211> LENGTH: 27  
 231 <212> TYPE: DNA  
 232 <213> ORGANISM: Artificial  
 234 <220> FEATURE:  
 235 <223> OTHER INFORMATION: attP11  
 237 <400> SEQUENCE: 18  
 238 gttcaacttt tctatacaaa gttggca 27  
 241 <210> SEQ ID NO: 19  
 242 <211> LENGTH: 24  
 243 <212> TYPE: DNA  
 244 <213> ORGANISM: Artificial  
 246 <220> FEATURE:  
 247 <223> OTHER INFORMATION: attL11  
 249 <400> SEQUENCE: 19  
 250 caacttttct atacaaagtt ggca 24  
 253 <210> SEQ ID NO: 20  
 254 <211> LENGTH: 25  
 255 <212> TYPE: DNA  
 256 <213> ORGANISM: Artificial  
 258 <220> FEATURE:  
 259 <223> OTHER INFORMATION: attR11  
 261 <400> SEQUENCE: 20  
 262 gttcaacttt tctatacaaa gttgt 25  
 265 <210> SEQ ID NO: 21  
 266 <211> LENGTH: 22  
 267 <212> TYPE: DNA  
 268 <213> ORGANISM: Artificial  
 270 <220> FEATURE:  
 271 <223> OTHER INFORMATION: attB17  
 273 <400> SEQUENCE: 21  
 274 caacttttgt atacaaagtt gt 22  
 277 <210> SEQ ID NO: 22  
 278 <211> LENGTH: 27  
 279 <212> TYPE: DNA  
 280 <213> ORGANISM: Artificial  
 282 <220> FEATURE:  
 283 <223> OTHER INFORMATION: attP17  
 285 <400> SEQUENCE: 22

Same  
 errors

## RAW SEQUENCE LISTING

DATE: 03/13/2007

PATENT APPLICATION: US/09/732,914B

TIME: 15:43:47

Input Set : N:\efs\03\_12\_07\09732914B\_efs\IVGN251\_ST25.txt

Output Set: N:\CRF4\03132007\I732914B.raw

286 gttcaacttt tgtatacaaa gttggca

289 &lt;210&gt; SEQ ID NO: 23

290 &lt;211&gt; LENGTH: 24

291 &lt;212&gt; TYPE: DNA

292 &lt;213&gt; ORGANISM: Artificial

294 &lt;220&gt; FEATURE:

295 &lt;223&gt; OTHER INFORMATION: attL17

297 &lt;400&gt; SEQUENCE: 23

298 caacttttgt atacaaagtt ggca

301 &lt;210&gt; SEQ ID NO: 24

302 &lt;211&gt; LENGTH: 25

303 &lt;212&gt; TYPE: DNA

304 &lt;213&gt; ORGANISM: Artificial

306 &lt;220&gt; FEATURE:

307 &lt;223&gt; OTHER INFORMATION: attR17

309 &lt;400&gt; SEQUENCE: 24

310 gttcaacttt tgtatacaaa gttgt

313 &lt;210&gt; SEQ ID NO: 25

314 &lt;211&gt; LENGTH: 22

315 &lt;212&gt; TYPE: DNA

316 &lt;213&gt; ORGANISM: Artificial

318 &lt;220&gt; FEATURE:

319 &lt;223&gt; OTHER INFORMATION: attB19

321 &lt;400&gt; SEQUENCE: 25

322 caactttttc gtacaaagtt gt

325 &lt;210&gt; SEQ ID NO: 26

326 &lt;211&gt; LENGTH: 27

327 &lt;212&gt; TYPE: DNA

328 &lt;213&gt; ORGANISM: Artificial

330 &lt;220&gt; FEATURE:

331 &lt;223&gt; OTHER INFORMATION: attP19

333 &lt;400&gt; SEQUENCE: 26

334 gttcaacttt ttcgtacaaa gttggca

337 &lt;210&gt; SEQ ID NO: 27

338 &lt;211&gt; LENGTH: 24

339 &lt;212&gt; TYPE: DNA

340 &lt;213&gt; ORGANISM: Artificial

342 &lt;220&gt; FEATURE:

343 &lt;223&gt; OTHER INFORMATION: attL19

345 &lt;400&gt; SEQUENCE: 27

346 caactttttc gtacaaagtt ggca

349 &lt;210&gt; SEQ ID NO: 28

350 &lt;211&gt; LENGTH: 25

351 &lt;212&gt; TYPE: DNA

352 &lt;213&gt; ORGANISM: Artificial

354 &lt;220&gt; FEATURE:

355 &lt;223&gt; OTHER INFORMATION: attR19

357 &lt;400&gt; SEQUENCE: 28

358 gttcaacttt ttcgtacaaa gttgt

27  
 ✓ Same  
 errors

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The type of errors shown exist throughout the Sequence listing. Please check subsequent sequences for similar errors.

RAW SEQUENCE LISTING ERROR SUMMARY  
PATENT APPLICATION: US/09/732,914B

DATE: 03/13/2007  
TIME: 15:43:48

Input Set : N:\efs\03\_12\_07\09732914B\_efs\IVGN251\_ST25.txt  
Output Set: N:\CRF4\03132007\I732914B.raw

**Please Note:**

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:39; N Pos. 8,9,10,11,12,13,14  
Seq#:40; N Pos. 8,9,10,11,12,13,14  
Seq#:94; N Pos. 7,8,10,11,12,14,15  
Seq#:106; N Pos. 20,21,22,23,24  
Seq#:107; N Pos. 25,26,27,28,29  
Seq#:108; N Pos. 20,21,22,23,24  
Seq#:109; N Pos. 25,26,27,28,29  
Seq#:110; N Pos. 27,28  
Seq#:113; N Pos. 26  
Seq#:114; N Pos. 27,28  
Seq#:117; N Pos. 27  
Seq#:139; N Pos. 13,14  
Seq#:140; N Pos. 13

**Invalid <213> Response:**

Use of "Artificial" only as "<213> Organism" response is incomplete,  
per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:1,2,3,4,5,6,7,8,9,10,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28  
Seq#:29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52  
Seq#:53,54,55,56,57,58,59,60,61,62,63,64,65,66,67,68,69,70,71,72,73,74,75,76  
Seq#:77,78,79,80,81,82,83,84,85,86,87,88,89,90,91,92,93,94,95,96,97,98,99,100  
Seq#:101,102,103,104,105,106,107,108,109,110,111,112,113,114,115,116,117,118  
Seq#:119,120,121,122,123,124,125,126,127,128,129,130,131,132,133,134,135,136  
Seq#:137,138,139,140,141

## VERIFICATION SUMMARY

DATE: 03/13/2007

PATENT APPLICATION: US/09/732,914B

TIME: 15:43:48

Input Set : N:\efs\03\_12\_07\09732914B\_efs\IVGN251\_ST25.txt

Output Set: N:\CRF4\03132007\I732914B.raw

L:496 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:39 after pos.:0  
L:514 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:40 after pos.:0  
L:1168 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:94 after pos.:0  
L:1318 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:106 after pos.:0  
L:1336 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:107 after pos.:0  
L:1354 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:108 after pos.:0  
L:1372 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:109 after pos.:0  
L:1390 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:110 after pos.:0  
L:1436 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:113 after pos.:0  
L:1454 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:114 after pos.:0  
L:1496 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:117 after pos.:0  
L:1766 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:139 after pos.:0  
L:1784 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:140 after pos.:0